

HEC Paris

Does M&A create value?

Master Thesis

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0. Introduction

The conventional wisdom that most of M&A transactions destroy value perhaps has become obsolete. This investigation tries to analyze whether success rate in M&A have risen or not.

The consensus derived from a series of studies focused on M&A transactions that were developed during the 90s may say no. Through different quantitative approaches, these analyses have established the failure rate between 70% and 90%. However, although it is known that most of the transactions destroyed value in the past, corporate and investment funds have conducted transactions with better results between the 2000-2007 period, being 2007 the year in which all records were broken, before the economic crisis.

The aim of the thesis is to objectively analyze a data sample of M&A transactions and conclude whether M&A creates value or not. Of course, after the analysis it is not going to be possible to make conclusions generally, as the study only focuses on a specific data sample, but it may develop which are some factors that affect the M&A value creation.

In order to develop the whole analysis, value creation is going to be measured through already developed metrics, so no value creation measures are going to be created.

In fact, the final part of the revision of the existing literature is going to be based on the explanation of the different measures that have been used during history to measure value creation. Then, the method which suits better to the study is going to be used and final conclusions are being presented at the very final part of the thesis.

LITERATURE REVIEW

1. General overview and trends

1.1. Reasons for M&A

Types of buyers

M&A is motivated for various reasons that define two different types of buyers

Strategic buyers

Strategic buyers are those who develop their activities in a specific industry and try to remain and consolidate their position in it.

From the perspective of a seller, the key point is to consider that the value the buyer is considering takes into account the synergies that the buyer is willing to obtain from the combination of both business units. Hence, a strategic buyer will usually bid higher than a financial one, due to a valuation composed by the company as standalone plus its synergies. If the target is a direct competitor, the acquisition will provide the buyer sustainable and long term competitive advantage, with lower production costs or a higher quality. Hence, it will be willing to overpay for the business.

Financial buyers

They are characterized for acquiring companies only for financial purposes, such as to increase their value and then selling them for a higher price. In this type of transactions it is critical to understand which possible exit strategies are, being this main difference with strategic buyers.

Unlike strategic buyers, financial ones look first at the potential of a business as standalone, and its ability to generate cash flow as value creation. Usually, the value that a financial buyer expects depends on a growth of revenues in the future, a cost cutting, or even both of them. These facts affect in a brutal way the company. It is common that the buyer modifies the operations, which translates to in high pressure to the staff and sometimes even to layoffs.

Main objectives

Usually the main objectives for financial and strategic buyers are different, but, in the end, both of them look for value creation. The forms buyers find to create value through mergers and acquisitions are:

Horizontal integration

A horizontal integration is the acquisition (or merge) of a company that operates in the same activity and is a direct competitor. Surely, horizontal integration allows the buyer to create value. It is possible to do that through economies of scale, which allows reducing the unitary average cost. Furthermore, the bargaining power of the resulting company is higher. Hence, it is possible to negotiate lower prices with suppliers or increase the final price due to fewer competitors in the market.

Vertical integration

It is the case when a company acquires its supplier with the purpose of producing its own supplies, which is called upstream integration. Also, a downstream integration occurs when a company acquires its client, so they can use its production system or distribution network. This may happen when supplies specific parts of the product chain are key drivers in the industry.

Geographic diversification

Usually this would happen when a company wants to expand its business into a new country/continent. Through M&A, companies are able to expand geographically much easier than through organic growth, that would be costlier and longer.

Cross-selling

One of the key concepts in revenue synergies. It may happen when a company buys another one which sells complementary products, so in the end the company tries to sell both of them to the final customer mix. A great example would be what telecom companies are doing nowadays, selling mobile, fix lines, Internet and cable to the clients after M&A executions.

Improvements in the acquired company management

In this case the target is a company which is not generating value enough due to inefficiencies. The buyer would obviously be a company with a management capable of improving it.

Access to new technologies

The ongoing tech change requires companies to constantly renew themselves to be competitive enough. In some cases they will be forced to buy a competitor in order to have access to a specific technology.

How to create value from an M&A transaction

There are several sources of value creation in an M&A transaction. However, most of them are difficult to be realized and even more to quantify them:

Achieving synergies

Synergies are the main point in all M&A transactions. Indeed, a company does not decide to acquire another, with the risks that involve a transaction like this if it does not hope to achieve in return a number of benefits, thus achieving to boost the enterprise value.

In general terms, synergies appear when the sum of the value of the acquirer and the target as a combined corporate is higher than the value of both of them as standalone. Most of M&A transactions are justified because of the amount of projected synergies.

The main objective of all M&A transactions is to generate value to shareholders exceeding the costs of acquisition. In fact, synergies are basically the only tangible justification for an acquisition, since they represent the extra value that can be created during an acquisition, assuming that the buyer pays a reasonable amount of money for acquiring the target, as no value has been created at that point.

Exemplary, let's consider a corporate with an enterprise value of 10 million Euros. A buyer accepts to pay 13 for this corporate. Hence, the buyer has paid a 3 million Euros control premium. This acquisition is only justifiable if it is possible to achieve synergies up to a minimum value of 3 million Euros.

While cost synergies are difficult to be obtained, revenue synergies are even more. A huge number of corporate operations fail when trying to achieve the forecasted synergies, and they finally destroy value to shareholders. Therefore it is essential when selecting a target to deeply analyze all possible scenarios being that taking into account a potential synergy is not a guarantee that this synergy will finally develop that potential.

There are three different categories of synergies: cost synergies, revenue synergies and financial synergies.

Cost synergies

Cost synergies refer to the ability to reduce costs of the combined corporate as a result of the consolidation of operations.

Potential sources of cost synergies include downsizing (redundancies), disposal of unused facilities, overhead and administrative cost reduction (accounting, marketing, IT), closing of the acquired headquarters, dismissal of the management team, increase in bargaining power (capacity of negotiating power due to a higher combined size).

Revenue synergies

Revenue synergies refer to the ability to sell more products/services or to gain market share as a consequence of the M&A transaction.

Potential sources of revenue synergies are sharing distribution network, marketing and selling complementary products, cross selling, access to new markets, decrease in competition.

Financial synergies

Financial synergies refer to those that affect the financial results of the corporate. Their main objective is achieving a more efficient capital structure and a lower cost of capital.

Potential sources of financial synergies could be for instance, an increase in the leverage capacity of the combined company, reduction in the cost of capital (due to risk reduction or increase in size) or the improvement of cash surpluses and working capital. This is as consequence of complementary between both companies in terms of investment opportunities and cash surpluses. For instance, in many cases there are companies with attractive investment

opportunities but without enough resources and other without potential investments but with available cash ready to be invested.

Incentives or fiscal advantages

Other aspects to consider in an M&A transaction are fiscal aspects. Even though they are not the main principal in an acquisition, incentives or fiscal benefits are a lot of times determinant when they suppose a huge advantage for the buyer, lowering taxation and, therefore, lowering the final price.

The most important advantage is the Goodwill amortization that the transaction generates (provided that buyer and target are united in a single business unit). The Goodwill amortization is the possibility to reduce taxable income by the difference between the acquisition price and the market value of the acquired assets. To the extent that this amortization supposes a taxable income reduction it could be considered as a reduction in the cost of the transaction.

On the other hand, if the acquisition is a leveraged operation (debt is used to finance the operation), the acquiring company will pay interest expenses. The fact that interest expenses are tax deductible allows the buyer to decrease taxable income and, therefore, reduce tax expenses. This fiscal advantage is the one that favored proliferation of leveraged operations such as LBOs as well as the industry expansion of venture capitals, where most of the acquisitions were leveraged, so that part of the huge interest expenses were covered partly by the reduction of tax interests.

Access to new markets

In this type of operations, what is sought is the entry in a new market, where the acquirer does not have any operations. Thereby, a new part of the sector is covered through a process less costly and less time consuming than growing organically. In fact, settling a business for instance in a new country demands a deep knowledge and be sure that the entrance is a success. Some of the main issues to be worried about are the number of competitors, regulation that exist in that specific market, number of potential consumers, growth potential, etc. Nevertheless, through an M&A transaction, this can result simpler and faster since the target is already properly settled in that market and has already developed know-how to operate the business there.

Increase market share and pursue being the market leader

Also, the acquirer pursues to gain more market power, that is to say, increase capacity to fix a price that captures a higher portion of value, thanks to the reduction in market competitors in the industry.

Eliminating inefficiencies

In these cases the acquirer is looking for a company which is not generating value accordingly. In this way, the acquisition of these companies is the target of others that have a better management.

Human Capital Consequences

All M&A transactions usually have a series of consequences in the human capital of both acquirer and target. The first consequence, of course, is the dismissal of part of the target staff. In fact, a common approach when looking to cost synergies is dismissing redundant staff in the

company. Furthermore, these redundancies may suppose the exit of key people in the management team, despite of having demonstrated their capacity and know how.

On the other hand, while introducing a large and sudden change, M&A transactions often generate uncertainty and feeling of weakness.

This may lead to job dissatisfaction and stress. Instead of boosting returns, M&A transactions may even cause negative behaviors such as sabotage, increasing staff turnover, increase in absenteeism, etc.

As it has been said, it may be the case that in transactions like this, the companies merged have very different cultures, which can provoke discomfort in part of the staff.

Finally, M&A transactions can also produce discrepancies when looking to responsibilities. Conflicts may arise when responsibilities in the staff are not well covered or covered in excess due to role overlapping.

1.2. Merger waves

It may result interesting to mention that M&A does not have a clear trend; it is a cyclical and irregular event independent from the economical evolution of the countries where the companies are involved in. So that, five clear stages could be highlighted during the last century:

- **1895-1904:**

This big stage in corporate M&A was produced mainly in the United States, and coincided with a great economical period where both the GDP and corporate benefits grew.

Most of the transactions were consolidations and horizontal integrations in many sectors such as mining, transports and metals. Examples of these companies could be Standard Oil, General

Electric and Eastman Kodak. The main cause of these transactions was the overcapacity those companies were having at that moment. This wave triggered the consolidation of those sectors and the market share growth of those companies.

- **1920-1929:**

This second merger wave took place both in the US and in Europe. Unlike the first wave, this one was characterized by vertical integrations, companies buying either their suppliers or their clients.

The causes that triggered this wave were basically to ensure the supply of raw materials and the regulations introduced by the government that led to minimal prices, production quotas and antitrust laws.

Big public utility holdings appeared after this M&A period.

- **1965-1969:**

It was characterized by the formation of conglomerates and big groups, against the most rigorous antitrust laws. A huge important part of the activity was concentrated around these conglomerates, which were looking for diversification acquiring companies in different sectors.

This wave of corporate transactions happened during a period of economical growth and uptrend markets.

- **1981-1989:**

This big wave was not exactly the same in all the regions. Indeed, in the US the huge increase in M&A transactions started due to the revitalization of the free initiative and the deregulation in many sectors, which triggered that companies started a price war and an aggressive strategy to gain market share, looking for vertical integration both upstream and downstream.

Regarding Europe, the presence of the Unique Market encouraged big companies to look for opportunities of M&A internationally, with the objectives of restructuring their capacity and getting a size to be competitive enough.

Furthermore, during this phase a series of financial innovations were developed such as the Leveraged Buy Outs (LBOs), and the first Institutional Investors appeared, which allowed improving the precision in company valuation and a better mobility and interconnectivity in financial markets, which at the same time helped investments in different financial markets.

It was also a phase characterized by the growth of hostile takeovers, a higher leverage in transactions (due to the emergence of LBOs) and a price increase in the stock exchange.

The *Tax Reform Act* approved in 1986 contributed to the boom of corporate transactions.

- **1992-2000:**

Once the recession had finished, M&A transactions continued. During this period strategic buyers appeared; those investors that develop all their activity in a specific industry and try to stay and consolidate themselves in the market.

This period was defined by a high activity in the industrial, the financial and the technological sector (due to the Internet boom). After the bursting of the Internet bubble, corporate transactions decreased dramatically.

- **2003-2007:**

The last big M&A wave occurred during the previous years of the subprime crisis, and it was the big era of globalization and international merges.

After the bursting of the tech bubble, the main Central Banks decreased drastically the interest

rates, which incentivized companies to highly leverage their capital structure and financing their acquisitions with debt.

1.3. Methods of valuation

Comparable Companies Analysis Valuation

Comparable Companies is a relative valuation method used frequently in company valuation. This method is used to compute the value of a company by comparing it to other companies with similar size and geography. It is used under the assumption that similar companies must have similar valuation multiples, such as EV/EBITDA, EV/Sales, etc. Analysts compile a list of available data for the comparable companies, and compute the multiples to be able to define a valuation range.

Precedent Transaction Valuation

Precedent Transactions Methods is a relative valuation method based on precedent M&A transactions in a specific industry. The used ratios are the same ones as in Comparable Companies but, in most of the valuations, this technique usually reports a higher valuation due to the incorporation of a "control premium" that any company is willing to pay in exchange to taking the control of the target and the synergies they expect to obtain thanks to the acquisition. Then, the first step in this valuation method is finding similar transactions that have been done previously, taking into account size, industry, geography, business cycle, etc.

Discounted Cash Flow Analysis

Discounted Cash Flows (DCF) uses free cash flows projections that a company is able to generate and discounts them to the present using weighted average cost of capital (WACC) to get to the actual value, which is used, to evaluate the potential of a specific investment.

If the value obtained through the DCF is higher than the investment cost, the opportunity may result interesting. Despite the complexity of calculations the DCF requires, the main objective of the analysis is to estimate the cash that the asset will produce thanks to the investment and to adjust the money value through time.

Leveraged Buyout (LBO)

Leveraged Buyout is the acquisition of a company using a quantity of debt (usually syndicated loans) relatively important to pay the cost of the acquisition.

Generally, the assets of the acquired company are used as collateral. Main objectives of leveraged buyout are allowing sponsors to buying without using a huge amount of capital, and most important, using financial leverage to highly boost returns.

Obviously, there are other methods of valuation but they are not going to be treated here as it is out of the scope of the project.

2. Measurements of value creation

Value creation has to be understood as the performance of actions that increase the worth of goods, services or even a business. Many business operators now focus on value creation both

in the context of creating better value for customers as well as for shareholders in the business who want to see their stake appreciate in value.

Measuring value creation is not an easy task. Furthermore, it requires not only its measurement but the detection of everything which can lever it, the value drivers.

There are two different kinds of value creation measurers, the accounting ones (those who are based in accounting information) and the market ones (those who are based in market information).

Accounting based indices

Traditionally, accounting measures were the ones who were used the most. This is because they are pretty easy to obtain and analyze, as these data is well known by management and investors. Hence, the traditional accounting ratios to measure value creation have been:

- ROIC and ROE
- Market to Book Value
- Earnings per share (EPS)
- Profits

However, accounting shows historical data about the company, anticipating the future only in a negative way (when there are losses) and usually only in the short term, being then necessary the use of other methodologies.

In occasions the Payout Ratio and Dividends have been also used to calculate value creation. These ratios represent the company dividends policy, and in the case this ratio being positive this would be reflected in a value creation. This assertion is obviously wrong, as giving money back to shareholders is totally independent from creating value or not.

Market based indices

Then, in the last decades new methodologies have emerged in order to get a better approach of value creation calculation. Market based indicators such as EVA (Economic Value Added), MVA (Market Value Added), etc. In all of them it is considered that there is value creation when the final result is positive. Nevertheless, although they excel the accounting measures in certain aspects, they don't achieve to be totally independent from them, considering the information they use and the disadvantages they present.

- Economic Value Added (EVA)

EVA is net operating profit after taxes less a capital charge

$$EVA = (r - c) \cdot K = NOPAT - c \cdot K$$

$$r = \frac{NOPAT}{K}$$

r is the Return on Invested Capital (ROIC)

c is the weighted average cost of capital (WACC)

K is the economic capital employed

- Market Value Added (MVA)

MVA shows the difference between the market value of a company and the capital contributed by investors (both bondholders and shareholders). In other words, it is the

sum of all capital claims held against the company plus the market value of debt and equity.

$$MVA = \text{Company's Market Value} - \text{Invested Capital}$$

Abnormal return

Finally, the indicator that has been selected in this thesis to be analyzed is the abnormal return. This index faces the real return of the shareholder against the expected return of it or cost of equity of the company. This differential measures the value creation, and it is known as abnormal return.

The return received by the shareholder is defined as the increase in obtained value compared to the initial investment. The return is also divided into the increase in share value plus the remuneration the shareholder receives in dividends given a concrete time.

$$TSR = \frac{P_1 - P_0 + Dividends}{P_0}$$

The second component, which is the expected return from the shareholder and corresponds to the cost of equity (k_e), is calculated using the Capital Asset Pricing Model (CAPM), which is basically used in the pricing of risky securities and describes the relationship between risk and expected return.

$$k_e = r_f + \beta \cdot (r_m - r_f)$$

k_e is the cost of equity

r_f is the risk free security

β is the risk measure that compares the return of the asset to the market

r_m is the average return of the market

If the abnormal return is positive, then value has been created; if not, return has not been able to outperform shareholder expectations, hence, it has destroyed value. This index, in addition to better measuring value creation, has the advantage of being able to use it to compare among companies, regardless of the size of them.

3. Factors affecting M&A Performance

3.1. Premium paid

A wide study done in the early 2000s in 39 different countries shows that in M&A, control premiums go for an average 64% in Brazil to a -4% in Japan, being the international average around 14%.

In most of the M&A operations, the buyer doesn't pay the market value for the target, especially when we are talking about public companies. In cases when companies are private, price is more complicated to compute as those companies are not required to publish information regarding their financial statements. If we examine acquisition offers that are produced and compare them with the market price, we will notice that there always are differences, which may vary significantly.

Finally, it can be added that control premiums paid in M&A operations may depend on aspects such as stock liquidity, economic cycle, control dispersion among shareholders, etc.

3.2. Methods of payment

The buyer may choose among different options to face the payment of the acquisition. Different payment methods that are commonly used are:

- Cash: operations that are financed by available cash in the company. It is usually used when huge companies acquire smaller ones or as a portion of a huge acquisition. It is the favorite method for the seller.
- Shares: using shares of the acquiring company is another payment method in an acquisition. Indeed, the buyer can either raise new shares or use treasury shares, issued shares by own by the company itself. This payment methods is especially profitable for the buyer when its share value is relatively high, as, in that case, the company could be paying less for the target.
- Cash and shares: this payment method is a combination from the two previous ones. It is usually used in most of the M&A operations.
- Vendor loan: finally, it is true that vendor financing is not a common payment method, but it is used in some operations. Vendor financing is a loan from to seller to the buyer, to be used by the buyer to buy the target. So in the end it is nothing else than a referral of the payment. Let's put an example. There is an acquisition where both parties agree on closing the deal in € 100M. The payment will be done as follows: 50 million in shares, 40 million in cash and 10 million in vendor financing. Those 10 million are a loan the seller gives the buyer, in order to be able to defer part of the amount of the payment. These 10 million will be paid in an established date in the future.

4. Reasons why M&A transactions fail

According to a study done by the management consulting firm McKinsey, conclusions they presented were that between three and five years following the acquisition, 60% of the

companies failed in producing returns higher than the required cost of capital used to finance the acquisition and only 23% were successful. This data demonstrates that being successful after an M&A operation is not an easy fact.

Some reasons explaining why these operations fail:

Cultural integration problems between parties

Every company usually has its own particular culture, which may differ from other companies from the sector. This type of problems occurs when after an M&A operation, their cultures are not complementary. An example that could occur in the airline industry, when a low-cost airline is acquired by a flag carrier (high end). The personnel and services offered would probably be very different and could cause issues.

Synergy overestimation

During the evaluation previous to the acquisition, synergy estimations are carried out but those forecasts are not always met. If that is the case, cash flows produced would be smaller and the operation could fail.

Excessive paid Price

It happens when the buyer overpays when acquiring the target. It may happen whether when a very high control premium is paid or simply because the target is overvalued from the beginning. Some examples of this type of operations could appear in sector affected by economic bubbles, when market values of the companies are much higher compared to their fundamentals.

Failure when trying to achieve economies of scale

This may happen when a mismanagement situation occurs and the company is not able to reduce the unitary costs and achieve an increase in margins.

Finally, add that there are many other reasons why M&A fails such as incorrect definition of the financial objectives, governmental influences and the fact of not valuing the skills transfer problem.

Case Study

The case study tries to analyze whether M&A creates or destroys value. In order to assess that, the study uses the abnormal return methodology applied to a wide sample of M&A transactions.

5. Compilation of the data sample

The first task has been the definition of a sample of M&A transactions to run the study. All the data has been extracted from the Thomson Reuters database, and imported to Excel in order to proceed with the analysis (*See Appendix 10.2-Deal List*).

The study focuses on the period previous to the 2008 financial crisis; it has been defined from 2000 to 2007. Furthermore, in order to notice a real value creation, all abnormal returns have been calculated from one year prior to the announcement date to two years after the effective date. This timeline allows a real observation of value creation as opposed to possible market speculation during M&A periods.

Moreover, the US has been picked as the market to be analyzed. Europe could have also been a choice, but it has been thought that the US market is more homogeneous compared to Europe, where there are much more financial market differences among countries.

Finally, there have only been analyzed completed transactions as there is no point to analyze an unsuccessful acquisition and only those made by a public acquirer to a public target, as the abnormal return methodology is based on market data.

Type of Transactions	Only completed transactions
Financial market	US transactions

Type of acquirers	Public acquirers
Type of targets	Public targets
Period	Deals between 2000 and 2007

6. Methodology proposed

After having all the M&A transactions data, the first step has been calculating the real return during that period. To compute that number, what has been done is computing the initial and final price during the period for each stock, and adding the dividends (and other adjustments) from that period (*See Appendix 10.3.-Abnormal Return Calculation*).

$$Real\ return = \frac{P_1 + D_1 - P_0}{P_0} = \frac{P_1 + D_1}{P_0} - 1$$

Then, the next step has been computing the expected return for each stock. The methodology followed has been the Capital Asset Pricing Model (CAPM). To do that, the risk free rate has been calculated daily and computed for each period. This number has been added to the Beta of the stock times the market premium, which is the excess return of the market compared to the risk free. The Beta of each stock is provided by the database Thomson Reuters, as well as the market return.

The risk free rate has been computed as the 3Month US Treasury Rate while the market return as the S&P 500 return during the defined period (*See Appendix 10.4.-US Treasury Bond Data*).

Finally in order to compute the abnormal return for each stock, what has been done is subtracting the expected return from the real return (that number is usually called alpha).

$$alpha\ (Abnormal\ Return) = Real\ Return - Expected\ Return$$

If alpha is positive, then the stock is returning a value higher than what was expected. Hence it creates value (See *Appendix 10.3.-Abnormal Return Calculation*).

7. Final analysis

7.1. General: Does M&A create value?

The first analysis to be done is obviously whether M&A creates value or not. To do that, the approach followed has been calculating the Annual Abnormal Return for the whole sample of M&A transactions and then, defining a confidence interval for the mean of these abnormal returns.

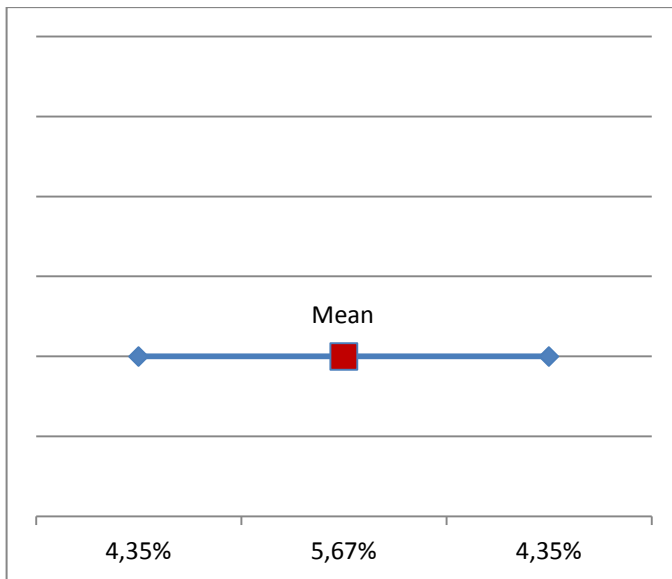
The results to this analysis are shown below:

Mean = 5,67%

Standard Deviation = 24,21%

RMSE= 0,67%

95% CI = [4.35% , 6.99%]

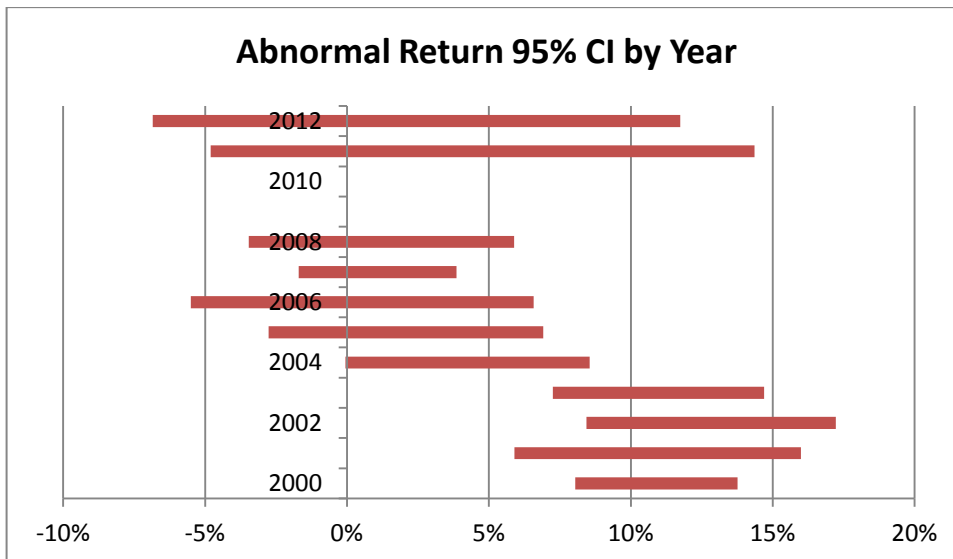


As it is shown above, M&A transactions have considerable positive abnormal returns in a 95% confidence interval for these concrete data sample.

7.2. Does M&A create value each year?

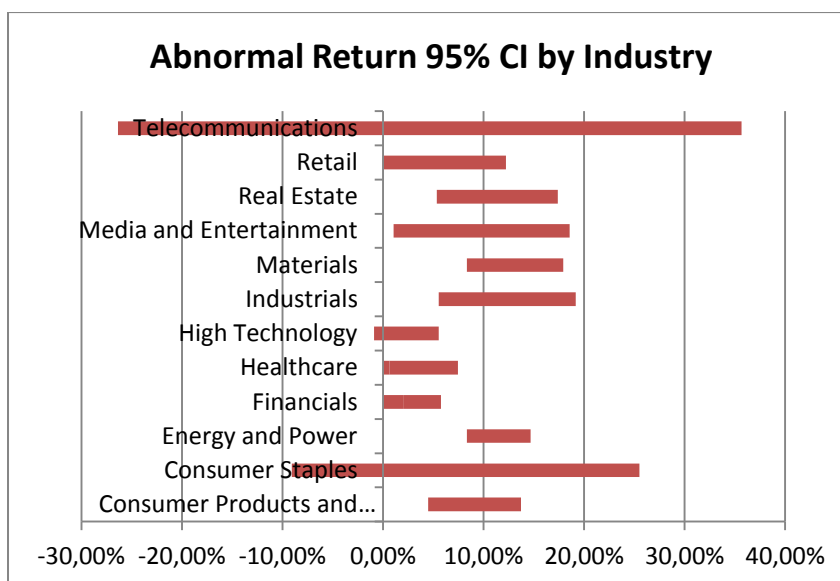
This analysis shows how volatile is abnormal return among years. Results make sense as abnormal returns are positive for the first years, which shows how great these years were for investors; and negative for pre-crisis years, predicting a failure of the financial market. It is also interesting noticing that there is no activity for the 2 years following the start of the crisis, showing that operations that were supposed to be closed in 2008 were postponed until 2011.

Years may be classified in three different groups: the first group includes years from 2000 to 2003, where abnormal returns are strictly positive and with low deviations. Then, from 2004 to 2008 when deviations are similar but returns are closer to zero. Finally, acquisitions that were supposed to be closed during 2008 had to wait until 2011, where deviations are huge due to few operations analyzed.



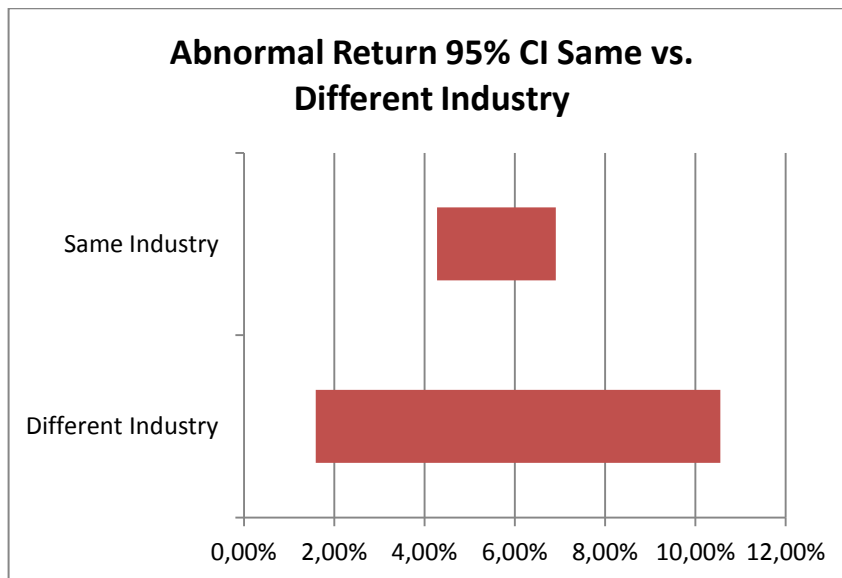
7.3. Does M&A create value across industries?

There is a lot of volatility regarding abnormal returns across industries. Out of 12, 8 of them have generated positive abnormal returns, which mean that 67% of industries have returned value to shareholders.



7.4. Does M&A create value when transactions occur within the same industry?

The analysis also wanted to analyze whether M&A across different industries was more difficult to make it profitable or not. Data says abnormal returns from both types of transactions are very similar, both being strictly positive.

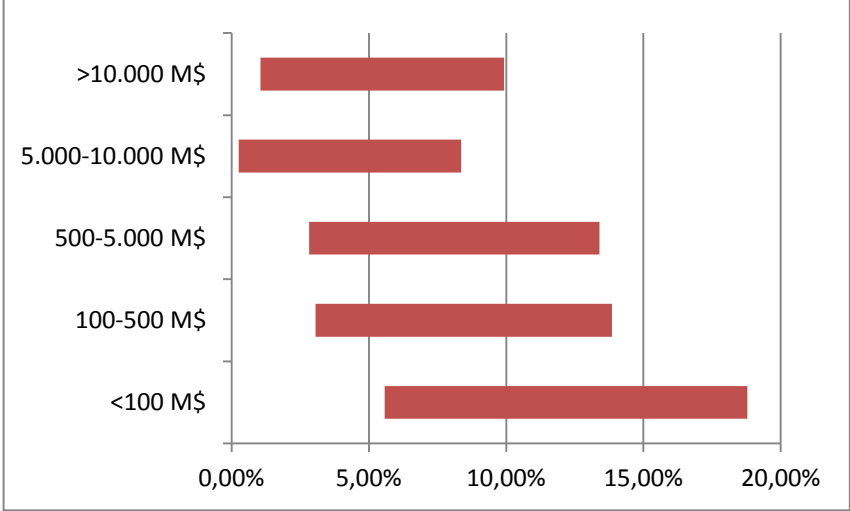


Hence, we cannot conclude that it is easier to make an M&A transaction profitable within the same industry compared to across industries. Further, the difference in deviations does not come from a lower volatility in transactions within the same industry, but from 80% of the transactions in that group.

7.5. Does size matter in M&A transactions?

Probably the first impression for everyone would be that huge M&A transactions have obviously more chances to fail. The analysis shows that although abnormal returns are lower, differences may be insignificant.

Abnormal Return 95% CI by Size



8. Final conclusions and next steps

After the study done there are many conclusions that can be extracted from the data sample analysed. It is important not to forget that it is only a study done on a concrete data sample, and it is difficult to extrapolate conclusions to the M&A sector in general, rather than focusing only in the study itself.

Also, the whole study is based on the abnormal return calculation through the CAPM model. We already have explained that this is one way to compute value creation, but this methodology is not perfect and obviously not real. It is just a method to model value creation in a way that tries to be precise. Hence, we cannot understand the conclusions from this analysis as a true fact.

The main conclusions that can be extracted from this analysis are:

- M&A transactions have had strictly positive abnormal returns in the data sample analyzed. This means that US transactions during the seventh year period between 2000 and 2007 have created value to shareholders
- There has been more value creation in M&A transactions during the first period (between 2000 and 2003) than during the others. It makes totally sense as during pre-crisis years companies were immersed in a crazy M&A wave where prices were totally overvalued and everything was paid through debt. Hence, it was really difficult to make those transactions profitable.
- The industry in which an M&A transaction is done really matters. Companies in industries like Energy, Basic Materials or Industrials have created strictly positive abnormal returns. Others like Telecom have huge volatilities in its returns, companies returning high value but others with really poor results.

- Finally, variables like the size of a transactions and the fact that a transaction is done within the same industry have no impact regarding value creation. Before the study was done, our hypothesis was that these variables could have great impact on value creation. Finally, the study has rejected the hypothesis.

From my point of view, a next step could be doing a deep dive in concrete examples of M&A transactions and understand the key facts of why such transaction created value or not.

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